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Reply to Office Action of May 12, 2008
August 1, 2008

REMARKS

New claims 24 - 29 have been added in order to alternately define the invention as disclosed in the specification.

Without conceding the propriety of the Examiner's position, and solely to expedite prosecution, claims 22 - 23 have been canceled without prejudice or disclaimer.

Applicant respectfully requests reconsideration of the prior art rejections set forth by the Examiner under 35 U.S.C. §103(a). Applicant respectfully submits that the prior art references of record, whether considered alone, or in combination, fail to either teach or suggest Applicant's presently claimed invention as amended.

Applicant had previously amended claims 1 and 5 such that claims 1 and 5 included the limitation that the optical recording / reproducing head included an optical source emitting a light having a wavelength of between 300 nm and 500 nm. Applicants argued that the Knight reference is directed to a particular structure for providing improved reading / reproducing in the visible red light range (See Col. 35, line 56, line 64). In apparent agreement with Applicant's position, the Examiner has newly asserted the Nagoya reference (USPAN 2003/0048740).

Nagoya, however, is directed to an entirely different optical component than that disclosed and claimed by Applicants and set forth in the remaining cited references, and is non-analogous art. Specifically, the Nagoya reference is

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directed to a magneto-optical recording device including a solid immersion mirror (SIM) having a coil 5 for magnetic modulation in the optical pick-up device. Such a mirrored optical element achieves a high numerical aperture by providing mirrored surfaces to internally reflect incident light beams across the lower and upper surfaces of the element before being ejected through a small central opening in the lower surface of the element.

In the *Deminski* case, the CAFC held that "The determination that a reference is from a nonanalogous art is therefore two-fold. First, we decide if the reference is within the field of the inventor's endeavor. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved." *In re Deminski*, 796 F.2d 436, 442 (Fed. Cir. 1986). A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem. *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992).

In *Wang Laboratories*, the Federal Circuit considered the issue of whether a single in-line memory modules ("SIMMs") having eight word data storage chips capable of storing 8-bit words (bytes) and a ninth parity bit chip packaged in plastic leaded chip carriers ("PLCCs") is "in the same field of endeavor" as that of the newly asserted Allen-Bradley patent (the " '392") and its commercial counterpart (the "X9 SIMM"). The '392 patent disclosed a SIMM with nine

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memory chips (8 data, 1 error detection) mounted in a single row. Allen-Bradley sold the X9 SIMM in a programmable controller consisting of chips encapsulated in ceramic dual in-line packages mounted on an epoxy-glass printed circuit board substrate. The CAFC held that "The Allen-Bradley art is not in the same field of endeavor as the claimed subject matter merely because it relates to memories. It involves memory circuits in which modules of varying sizes may be added or replaced; in contrast, the subject patents teach compact modular memories." *Wang Laboratories, Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 USPQ2d 1767 (Fed. Cir. 1993).

In regard to the second prong of the analogous / non-analogous test set forth in *Deminiski*, the CAFC found that "Wang's SIMMs were designed to provide compact computer memory with minimum size, low cost, easy repairability, and easy expandability. ... In contrast, the Allen-Bradley patent relates to a memory circuit for a larger, more costly industrial controller. SRAMs were used by Allen-Bradley because of their intended industrial environment. According to Dr. Frey, size was not a consideration in the Allen-Bradley work. Thus, there is substantial evidence in the record to support a finding that the Allen-Bradley prior art is not reasonably pertinent and is not analogous." *Id* at 865.

In this case the Nagoya reference is not in the same field of endeavor as Applicant's currently claimed invention or any of the other references cited by the Examiner disclosing near-field lens systems for optical recording. Here,

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Nagoya discloses an entirely different optical element (SIM (mirror) vs. SIL (lens)) for performing an entirely different operation (Magnetic modulated optical recording vs. Optical recording).

Additionally, the Nagoya reference is not reasonably pertinent to the particular problem with which the inventor was involved. Nagoya fails to disclose any application to optical recording, any use of non-mirrored lenses, and actually teaches away from the use of high-NA lenses in paragraph [0029].

Accordingly, for at least this reason, Applicants respectfully request that the Examiner withdraw the Nagoya reference as non-analogous art, and that all pending claims be allowed to issue.

Alternately, even if Nagoya was considered to be analogous art, the reference can not be combined with any of the other references cited by the Examiner as the reference clearly teaches away from the use of high-NA lens systems. See, for example, paragraph [0029] of the reference, which states that "high refraction index glass ... cannot be employed for practical use, because the large chromatic aberration is generated by the above-mentioned wavelength change of the light source. However, since most of the light-converging power is shouldered by the reflective surface in the present invention, the longitudinal chromatic aberration is so small that the high refractive glass can be employed..."

Applicants note that the Court of Appeals for the Federal Circuit has held that "A reference may be said to teach away when a person of ordinary skill,

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upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. *In re Gurley* 27 F.3d 551, *553 (Fed. Cir.,1994). It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983).

Accordingly, one of ordinary skill in the art would not have combined the references in the manner asserted by the Examiner, in light of the clear teaching away in Negoya of using a high refractive NA lens system. At most, in light of Negoya, one of ordinary skill in the art may have been motivated to utilize a solid immersion mirror component for conducting magnetic modulated optical recording in a recording medium of one of the other references cited by the Examiner.

Accordingly, for at least this reason, Applicants respectfully request that the Examiner withdraw the rejection of all of the claims under 35 U.S.C. §103 in view of the Nagoya reference, and that all pending claims be allowed to issue.

In regard to the Examiner's rejection of claims 12 and 13, Applicants submit that the Examiner's stated 'unexpected results' test only applies to a claimed range which overlaps with a prior art range. In such a case, the M.P.E.P. states that an Applicant claiming an "optimization within prior art ranges" must show unexpected results. Here, however, Applicant's claimed range does not overlap with the prior art range, and thus, no showing of

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unexpected results is required under the current law. The cited *In re Woodruff* case is inapposite to the facts in this case. Applicants make no representation regarding whether such a showing could be made.

In regard to the rejection of claims 18 and 19 further in view of Ueyanagi (USPN 6,704,250), Applicants submit that Ueyanagi is non-analogous art for the same reasons noted above in regard to the Negoya reference. Ueyanagi is directed to a mirrored condensing medium, not a lens. The Examiner's assertion of "simple substitution" fails in light of Negoya's clear teaching away of applying high-NA mirrored condensing compositions to non-mirrored lenses.

In regard to the rejection of claims 20 and 21 further in view of Yamada (USPN 5,024,927), Applicants submit that the Examiner's rationale for combining the references is unclear. The cited portion of the Yamada reference (col. 9, lines 45 – 51) sets forth that a reflective layer may be optional in particular layer arrangements of Yamada, but fails to provide any teaching or motivation for eliminating a reflective layer in the structures provided for in Knight, Okubo, and Nagoya.

The Examiner's remaining references cited but not relied upon, considered either alone or in combination, also fail to teach applicant's currently claimed invention. In light of the foregoing, Applicants respectfully submit that all claims now stand in condition for allowance.

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In the event that it is deemed necessary, the Commissioner is hereby
authorized to charge any fees due or to credit any overpayment to Deposit
Account No. 50-3891.

Respectfully submitted,

Date:

8/1/08

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